

this area are consistently different in coloration from a long series of the typical race, from southern California, Arizona, Utah New Mexico, and extreme northwestern Mexico, and appear to be a recognizable race, which may be known as—

Lophortyx gambelii ignoscens, n. subsp.

Type.—U.S.N.M. 9363, adult, unsexed (but male by plumage), collected at San Elezario, Texas, December 1855, by Dr. C. B. Kennerly.

Characters.—Similar to *Lophortyx gambelii gambelii* but with the long feathers of the sides and upper flanks lighter in color—between Sanford's brown and chestnut (while in the nominate race these feathers are between chestnut and bay in color) and somewhat paler generally, especially so on the crown, breast, and back.

As in the other races of this species the amount of buffy color on the abdomen can be appreciated only in birds with fairly fresh plumage, as the color seems to bleach out to whitish, even in such a saturated buffy race as *fulvipectus*. The type of *ignoscens* is a bird in fairly fresh plumage; the rest of my specimens of this form are in bleached worn plumage, but the color of the elongated chestnut feathers is quite the same in all. There is no size difference between *ignoscens* and *gambelii*.

Range.—The extremely dry desert region, sometimes called the "eastern succulent des-

ert from Fort Fillmore, N. Mex., east to extreme western Texas—El Paso, Belen, San Elezario, and Fort Hancock—east to Presidio del Norte and to the Limpia River, Jeff Davis County. It does not extend farther eastward into Brewster County, and apparently does not go southward into adjacent areas of Mexico, but is limited to the area of low rainfall (under 10 inches a year). Thus, a male from Cajon Bonito Creek, Chihuahua, is *gambelii*. Similarly, in New Mexico its range is restricted to this very arid little belt. Specimens typical of *gambelii* in every way have been examined from the following localities in fairly nearby parts of southern New Mexico: Fort Bayard, Frisco, Garfield, Gila National Forest, Grafton, Joseph, Silver City, and near Tyrone. These indicate that the country to the north of this "eastern succulent desert" is inhabited by *gambelii*. A bird from the San Luis Mountain, just within the more arid region, is paler, and agrees with *ignoscens*.

The characters of *ignoscens* appear to be more pronounced in males than in females, although it must be admitted I have but three females of the new form for study. Two females from Cajon Bonito Creek, northern Chihuahua, are very similar to them, but the male from that locality is definitely *gambelii*. It may be that the two forms intergrade in the area around Cajon Bonito Creek.

Of the new race *ignoscens* I have seen eight males and three females.

ZOOLOGY.—*A new snake of the genus Tropidodipsas from Mexico.*¹ HOBART M. SMITH, University of Rochester. (Communicated by HERBERT FRIEDMANN.)

Among the snakes secured by Thomas MacDougall during the winter of 1941-42 on the Isthmus of Tehuantepec is one belonging to the section of *Tropidodipsas* characterized by the very short head, small posterior chinshields, and small eye. It does not agree with either subspecies of *sartorii* now recognized, the only other members of this section of the genus known from Mexico. I am indebted to Dr. E. H. Taylor for permission to describe it.

Tropidodipsas macdougalli, n. sp.

Type.—E. H. Taylor-H. M. Smith collection No. 28088, from Tehuantepec, Oaxaca, colert,"

¹ Received September 15, 1943.

lected by Thomas MacDougall during January, 1942.

Diagnosis.—Related to *T. sartorii*. Dorsal scales in 17 rows, absolutely smooth throughout length of body; black bands 27 on body, 9 on tail, generally a little more than twice length of light interspaces; ventrals 199; caudals 65, in a female; eye diameter about equal to its distance from labial border; head relatively short; posterior chinshields very small.

Description.—Head somewhat mutilated. Internasals a little less than half area of prefrontals, their common suture about two-thirds length of common median suture of prefrontals; length of sutures between rostral and internasals about equal to length of sutures between

an internasal and a prefrontal, and about equal to a common nasorostral suture; frontal relatively short, about as long as broad, sides smoothly convergent posteriorly and outlining a shield-shaped scale; parietals short, but little longer (6 mm) than broad (5 mm); maximum length of parietals about equal to distance from posterior tip of frontal to internasal-prefrontal suture. Nasal large, divided; loreal square on one side, rectangular on other; latter entering orbit between preoculars; two preoculars, subequal on one side, lower much the smaller on other side; two postoculars, relatively large; temporals 1-2, anterior in contact with both postoculars; supralabials 6-7, third and fourth (fourth and fifth) entering orbit; diameter of orbit equal to distance of eye from labial border; posterior labial about as broad as long, other labials higher than long.

Infralabials 8-9, first in contact on median line; mental small; anterior chinshields about twice as long as broad, in contact with 5-6 infralabials; posterior chinshields indistinguishable.

Dorsal scales in 17-17-17 rows, all perfectly smooth, even posteriorly, pitless; ventrals 199; anal entire; subcaudals 65, divided; female. Total length 697 mm, tail 132 mm.

Body pattern of complete black rings separated from each other by light areas now (late 1942) somewhat pinkish in color (not improbably discolored, as all bands, even at nape, are of the same shade); black rings on body 27, on tail 9, all very slightly narrower laterally than medially; medially the bands are usually a little more than twice as wide as the light interspaces, which generally cover about two scale lengths; on the belly the light interspaces average about as long as the dark rings.

The head is black above, except for a light spot on the posterior angle of the frontal; the color covers the parietals, but laterally extends over only the anterior temporal, anterior half of the penultimate supralabial, and all other scales anterior to these. The mental, anterior three or four infralabials on each side and a spot on each anterior chinshield are black.

Remarks.—The single specimen of this form known shows a relationship to *sartorii*, which like it has distinct black rings, 17 scale rows, a very short head, posterior chinshields absent or indistinct, and an essentially similar head scutellation. With *occidentalis* and *philippii*,

with 15 scale rows, there is obviously no close relationship. All other species known from or probably occurring in Mexico (*guerreroensis*, *fasciata*, *fischeri*) belong to another section of the genus, characterized by long heads, large eyes, and relatively large chinshields; moreover the patterns of these three species do not correspond with those of *macdougalli*.

From *sartorii* this specimen differs in number of black rings on body (27 as opposed to 13 to 24) and tail (9 as opposed to 4 to 8), number of ventrals (199 compared with 173 to 185), and number of subcaudals (65 in a female as compared with 54 to 63 in the same sex). The keels, which are fairly distinctly evident in *sartorii*, are indistinguishable in this.

Intergradation with *sartorii sartorii* is not improbable; in support of this is a specimen (U.S.N.M. 109908) from Tenosique, Tabasco, with 24-8 black rings; the ventrals (♂) are 180 the subcaudals 66. All other *s. sartorii* examined (8, from Alvarez and Tamazunchale, San Luis Potosí; Potrero Viejo, Veracruz; Emiliana Zapata, Tabasco; and Chuntuquí, Guatemala) have 22-7 black rings or fewer. Regardless of the possibility of intergradation of *macdougalli* and *s. sartorii*, the former is definitely not intermediate in character between the latter and *s. annulatus*, since neither has as many ventrals or dark rings as the new form, although geographically it appears more or less intermediate.

The exact provenance of the specimen is uncertain. It possibly was taken in one of the mountain ranges west or northwest of Tehuantepec, perhaps as far away as 20 miles (straight line). It seems unlikely that the species occurs in the close vicinity of the city of Tehuantepec, since the intensive collecting of recent years has not disclosed its presence there. Nevertheless the latter possibility remains, for the energetic collecting methods of Dr. Joseph R. Slevin has unearthed in the vicinity of Tehuantepec a specimen of another species of *Tropidodipsas*, also unrepresented in the voluminous recent collections from that area.

Tropidodipsas guerreroensis Taylor

Of considerable interest is a specimen, collected by J. R. Slevin at Mixtequilla, Oaxaca, on August 25, 1925 (Calif. Acad. Sci. 73653). The only other known in United States museums is the type, from Buena Vista, Guerrero.

It is much like the type as described by Taylor (Univ. Kansas Sci. Bull. 26: 470-473, fig. 7, pl. 50, 1939 [1940]). The body is somewhat compressed, the keels on the dorsal scales are rather well defined, the head is relatively elongate, the eyes are large, and the posterior chinshields are nearly half the length of the anterior. As in the type a pair of chinshield-like scales precedes the first ventral, following the other chinshields. The loreal is elongate, separated from eye by the preoculars, which are 2-3 in number; temporals 1-2-2, 1-2-3; supralabials 8-8, infralabials 9-9; the prefrontals are a little larger, about $2\frac{1}{2}$ times as long as internasals. The dorsals are in 17 rows. The ventrals are 184, subcaudals 78. Since the specimen is a male, there are rather prominent knobbed keels above the anus, and numerous small, well-defined tubercles on the chin, throat and extreme anterior part of belly. Total length 603 mm, tail 153 mm.

The markings are much as in the type. The light gular area is not stippled, although the dorsal nuchal band (complete instead of interrupted medially) is finely mottled as in the type. The light bands are narrower posteriorly, most split medially with the halves alternating; they are not broken up into spots as in the type. Most of the dark rings reach the mid-venter, but only the anterior five are complete since the remainder is staggered; the light bands become wider on the lateral scale rows and on the belly.

The differences from the type exhibited by

this specimen are so few that they seem certainly conspecific. The somewhat greater regularity of the dorsal pattern, as well as the lower ventral count, in the Oaxaca specimen suggests more strongly than before a close relationship of *fasciata* and *guerreroensis*. This curious situation, in which a Yucatán form finds its closest relative on the Pacific coast of Mexico north of the Isthmus of Tehuantepec, has a parallel in other snake genera, as for instance *Lampropeltis* and *Stenorhina*. It is not impossible in this case, as in the others, that the forms involved actually intergrade somewhere on the Isthmus.

A number of references to *Tropidodipsas fasciata* (Sumichrast, Arch. Sci. Phys. Nat., 46: 246-247, 249. 1873; and Mocquard, Miss. Sci. Mex., livr. 16: 872-873, pl. 70, fig. 3, 1908) and *Leptognathus fasciatus* (Sumichrast, Bull. Soc. Zool. France 5: 184. 1880; and La Natureza 6: 44. 1882) from the Isthmus of Tehuantepec (Santa Efigenia, Cacoprieto) probably are referable to *T. guerreroensis*. The counts given by Mocquard (184 to 186 ventrals) for three specimens from "Mexico" and "Isthmus of Tehuantepec" agree with those of *guerreroensis*, and accordingly his illustrations probably are of that species. The identity of specimens recorded as *Leptognathus fasciatus* from Jicaltepec, Córdoba and San Andrés Tuxtla, Veracruz (Sumichrast, La Natureza 6: 44. 1882; and Ferrariperez, Proc. U. S. Nat. Mus. 9: 183. 1886) remains in doubt, but may well be correct. I can find no references in the literature that might apply to *T. macdougalli*.

ICHTHYOLOGY.—Review of the genera of blennioid fishes related to *Ophioblennius*.¹ EARL D. REID. (Communicated by LEONARD P. SCHULTZ.)

During the past few years I have attempted to identify certain blennioid fishes from the tropical Atlantic and Pacific Oceans. Many of these specimens were not identifiable with forms referred to the genus *Ophioblennius*. As the material was assembled and studied, it became more apparent that a review of this group of genera was needed. This report is a summary of my findings, based on material in the collections of the United States National Museum.

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After carefully studying all the available material related to *Ophioblennius*, the following key was prepared, giving the salient characters that I have concluded are most useful in recognizing the various genera:

- 1a. Gill openings not restricted, forming a free fold across isthmus.
- 2a. Strongly hooked canine teeth in front of upper and lower jaws.
- 3a. Ventral fins composed of a concealed spine and two rays; lateral line incomplete. *Ophioblennius* Gill
- 3b. Ventral fins composed of a concealed spine and four rays; lateral line complete or nearly so, a few pores lacking posteriorly. *Leoblennius*, n. g.